

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for preparing polyurethane-polyacrylate hybrid secondary dispersions, comprising
 - (I) preparing a polyurethane (A) having an average molecular weight M_n of from 1,100 to 10,000, which contains no polymerizable double bonds, in non-aqueous solution, by reacting
 - (A1) polyisocyanates with
an isocyanate-reactive component consisting of at least one compound selected from
 - (A2) polyols and/or polyamines having an average molecular weight, M_n , of at least 400,
 - (A3) compounds containing at least one ionic or potential ionic group and at least one other isocyanate-reactive group which are selected from mono- and dihydroxy carboxylic acids, mono- and diamino carboxylic acids, mono- and dihydroxy sulphonic acids, mono- and diamino sulphonic acids, mono- and dihydroxy phosphonic acids and mono- and diamino phosphonic acids; salts of the preceding acids; and N-methyl diethanolamine; and nonionic hydrophilic compounds containing at least one isocyanate-reactive group, which are selected from polyoxyalkylene ethers containing at least one hydroxyl or amino group,
 - (A4) compounds which are different from (A3) and (A5), have a molecular weight, M_n , of less than 400, and are selected from alkane diols, alkane polyols, ether diols, ester diols, diamines and polyamines, and

(A5) monofunctional, isocyanate-reactive compounds which are selected from monoamines and monoalcohols; and compounds which contain active hydrogen having different reactivity to isocyanate groups which are selected from compounds containing primary and secondary amino groups and compounds containing hydroxyl and amino groups,

optionally in the presence ~~where appropriate~~ of vinylically unsaturated monomers which carry no groups that are reactive towards isocyanate groups,

(II) adding to the polyurethane solution (A), one or more vinylically unsaturated monomers (B) comprising a member selected from ~~at least one of the group containing~~ consisting of

(B1) acid-functional monomers,

(B2) hydroxyl- and/or amino-functional monomers,

(B3) ~~other monomers different from~~ other than (B1) and (B2),

and subjecting the resultant mixture to free-radical polymerization in a homogeneous, non-aqueous phase to provide a hybrid polymer,

(III) optionally neutralizing at least some of the ~~neutralizable~~ any potential ionic groups introduced via component (A3), and

(IV) dispersing the hybrid polymer into the aqueous phase, wherein the neutralization can take place before or after the vinyl polymerization or during the dispersing step.

2. (Cancelled)

3. (Original) The process according to Claim 1, wherein the free-radical polymerization is conducted such that at the end the fraction of the acid-functional monomers in the monomer mixture is higher than at the beginning.

4. (Original) A polyurethane-polyacrylate hybrid secondary dispersions obtained according to the process of Claim 1.

5. (Original) The polyurethane-polyacrylate hybrid secondary dispersions according to Claim 4, wherein the hybrid polymer contains hydroxyl groups both in the polyurethane fraction (A) and in the vinylically unsaturated monomers fraction (B).

6. (Withdrawn) Aqueous two-component (2K) coating compositions comprising polyurethane-polyacrylate hybrid secondary dispersions according to Claim 4 and also at least one crosslinker.

7. (Withdrawn) The aqueous two-component (2K) coating compositions according to Claim 6, wherein the crosslinker is a polyisocyanate.

8. (Withdrawn) The aqueous two-component (2K) coating compositions according to Claim 7, characterized in that the crosslinker is a polyisocyanate containing free isocyanate groups based on aliphatic or cycloaliphatic isocyanates.

9. (Withdrawn) A process for producing coatings, comprising applying the polyurethane-polyacrylate hybrid secondary dispersions according to Claim 4 to substrates selected from the group consisting of concrete, screeding, mineral surfaces, wood, wood-based materials, metal, asphalt-containing or bituminous coverings, plastics surfaces, glass, glass fibres, carbon fibres, woven and non-woven textiles, leather, paper, hard fibres or straw and dried.

10. (Withdrawn) The process according to Claim 9, wherein the substrate is metal or plastic.

11. (Withdrawn) Substrates coated with aqueous coating compositions comprising polyurethane-polyacrylate hybrid secondary dispersions according to Claim 4.

12. (Original) The polyurethane-polyacrylate hybrid secondary dispersions according to Claim 5, wherein vinylically unsaturated monomers (B) comprise polyacrylates.